

CLAIMS

What is claimed is:

1. Hand-held working tool, such as one of a setting device, for driving fastening elements including one of nails, bolts, and pins into a surface and an at least partially striking hand-held tool comprising:

a housing (11) including a work mechanism such as one of a setting mechanism and a striking mechanism and at least one sensing device (17) for detecting acceleration forces $\underline{a}(t)$ occurring during one of a setting and a striking impulse; and a handle part; wherein an interface (30, 31) for at least one of data communication and data output is arranged on said hand-held tool.
2. The hand-held working tool of claim 1, wherein said hand-held device (10) has an evaluation and storage mechanism (20) for processing and storing data ($\underline{a}(t)$, A , t_0 , T) detected by said sensing device (17).
3. The hand-held working tool of claim 1, wherein the sensing device (17) comprises at least one acceleration sensor (18).
4. The hand-held working tool of claim 1, wherein the sensing device (17) includes at least one discriminating means (19) for differentiating between impulses caused by said setting impulse and other acceleration forces.

5. The hand-held working tool of claim 4, wherein the interface (30) of the hand-held working tool (10, 10.1) comprises an external interface (110) for at least one of data input and data output that has a device (130) on the hand-held working tool (10, 10.1) for data communication with the interface (30) for data communication.
6. The hand-held working tool of claim 5, wherein said interface (110) includes an evaluation and storage means (120) for processing and storage of the data detected by the sensing device (17).
7. The hand-held working of claim 5, wherein said interface (110) has an optical data display unit (131), operating elements (132), and signal means (133).
8. The hand-held working tool of claim 7, wherein said hand-held working tool (10) has an optical data display unit (31.1), operating elements (32), and signal means (33).
9. The hand-held working tool of claim 8, wherein the evaluation and storage unit (20, 120) includes a microprocessor (21, 121) and at least one algorithm (22, 122) for detecting the physiological acceleration load A absorbed by an operator, from the detected data $(\underline{a}(t), A, t_0, T)$.

10. The hand-held working tool of claim 9, wherein an input means (27) is present at least for entry of user-specific identification characteristics.
11. The hand-held working tool of claim 10, wherein the interface unit (110) comprises user-specific identification characteristics that can be communicated.
12. The hand-held working tool of claim 11, wherein a means (23, 123) for initializing the microprocessor (21, 121) for exiting a sleep-mode of said sensing device (17) is provided.
13. The hand-held working tool of claim 12, wherein the at least one of the sensing device (17) and the evaluation and storage means (20, 120) contains a means (24, 124) for real-time measurements.
14. The hand-held working tool of claim 12, wherein said storage means (25, 125) comprises storage areas (26, 126) that are each allocated to a specific operator via said operator-specific identification characteristics.
15. An interface unit, for use with the hand-held working tool (10, 10.1) of claim 14, wherein the interface unit (110) acts as a device (130) for data communication with the interface (30) for data communication with said hand-held working tool (10, 10.1).

16. The interface unit of claim 15, wherein the interface unit (110) comprises an evaluation and storage means (120) for processing and storing data ($a(t)$, A , t_0 , T) detected by the sensing device (17).
17. The interface unit of claim 15, wherein the interface unit (110) has an optical data display unit (131), operating means (132), and signal means (133).
18. The interface unit of claim 16, wherein the evaluation and storage means (120) comprises a microprocessor (121) and at least one algorithm (22, 122) for the detection of said physiological acceleration loads A absorbed by the operator, from the given data ($a(t)$, A , t_0 , T).
19. The interface of claim 18, wherein the interface unit (110) comprises user-specific identification characteristics that can be communicated.
20. The interface unit of claim 18, wherein a means (123) for initializing the microprocessor (121) for exiting a sleep-mode of the initialization unit (110) is provided.
21. The interface unit of claim 20, wherein at least one of the interface unit (110) and the evaluation and storage means (120) comprises a means for real-time measurements.

22. The interface unit of claim 21, wherein the interface unit (110) is a vibration load meter that can store data ($\underline{a}(t)$, A , t_0 , T) relating to different operators using operator-specific identification characteristics.
23. The hand-held working tool of claim 3, wherein the sensing device (17) is arranged on said handle (16) of the hand-held working tool (10, 10.1).
24. The hand-held working tool of claim 4, wherein the sensing device (17) further includes a pressure sensor (19.1) for gaseous media for the detection of gas compression waves released by a setting operation in the working mechanism (12).